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A Study to Assess the Impact of Cell Phone among School Children in Bhubaneswar Khorda, Odisha

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ABSTRACT

Mobile phones have become an essential part of anyone's day to day life since 1990s. As cell phones have become more available, they are increasingly owned and used by college/university students as well. **Objectives: 1.** To assess the knowledge of student regarding Health impact of cell phone. **2.** To find out association between knowledge level regarding health impact and their Socio-demographic variable. **Methodology:** Non- experimental descriptive research design was selected for 200 school going children who were belongs age group between 10-18 years studied in selected school, Bhubaneswar, Odisha. Simple random sampling technique was used. **Results:** It shows that most of the students were having inadequate knowledge that is 43.611%. Only 18 % students having adequate knowledge regarding Health impact of cell phone. Knowledge level and their Socio-demographic variable (Age, Gender, Religion, father's occupation, Educational status of father's, mother's occupation, Number of siblings having, Type of family, Family income) were shows significantly associated (P<0.05).**Conclusion:** Each and every technology has its own advantages and disadvantages for students and mobile phone is one of them.

KEYWORDS: *Impact, Cell phones, School Children*

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INTRODUCTION

Learning is essential for development, and in today's world, electronics have become a supplement to learning activities. Students are invariably the ones who benefit from the devices when they are utilised properly, or who become a trap when they are misused. As previously said, the emphasis of this research is on the effects of smartphones on students pursuing higher education and their academic performance. If students have a cell phone, they may easily reach anybody at any time.

For example, if a pupil is in danger, he or she can call for help from their parents and protect themselves. Similarly, a student with a phone may notify police in any potentially dangerous circumstance, or the fire department if they discover a fire, or any other beneficial departments based on their requirements. As a result, one of the greatest answers for any emergency circumstance is a cell phone.[1]

Mobile phones, often known as hand phones, are powerful communication devices that were originally shown by Motorola in 1973 and were commercially accessible in 1984.[2]

Hand phones have become an inseparable part of our life in recent years. Every year, the number of mobile cellular subscriptions continues to rise. Globally, there were about seven billion users in 2016. Between 2000 and 2015, the global percentage of internet users surged sevenfold, from 6.5 percent to 43 percent.[3]

Dry eyes, computer vision syndrome, weakness of the thumb and wrist, neck pain and rigidity, increased frequency of De Quervain's tenosynovitis, tactile hallucinations, nomophobia, insecurity, delusions, auditory sleep disturbances, insomnia, hallucinations, lower self-confidence, and mobile phone addiction disorders are all symptoms of excessive use of mobile phones.[4]

Addiction to mobile phones can have the same catastrophic repercussions as addiction to alcohol or narcotic substances. In a 2012 research of female students, it was discovered that psychological qualities such as social extraversion and anxiety had a good impact on mobility, while self-esteem had a negative impact.[5]

According to an Iranian research, students' mobile addiction behaviour has a direct link to depressive illnesses, obsessive disorders, interpersonal sensitivity, habitual behaviour, and mobile addiction. With a $P < 0.001$, the findings were highly significant.[6]

Many mobile phone addicts have low self-esteem and bad social interactions, so they believe they need to be in contact

with others all of the time. Silence on your phone might cause anxiety, anger, sleep disruptions, tremors, sleeplessness, and digestive issues.[7]

Text messages are mostly shared inside established social networks made up of people who have known one other for a long time.[8]

Text messages are excellent for preserving both weak and strong relationships, but they can generate 'text-messaging ostracism,' which leads to isolation or exclusion in text-message-mediated social networks.[9]

OBJECTIVES OF THE STUDY

1. To assess the knowledge of student regarding Health impact of cell phone.
2. To find out association between knowledge level regarding health impact and their Socio-demographic variable.

HYPOTHESIS

H_0: There is no significant association between students knowledge level regarding the Health impact of cell phone with their selected Socio-demographic variable.

RESEARCH METHODOLOGY

RESEARCH APPROACH

Thethis study non-experimental quantitative (descriptive) research approach was used.

RESEARCH DESIGN

In this study**non-experimental descriptive research design**was to assess the knowledge Health impact of the students regarding use of cell phone.

POPULATION

In this study, the population is included 40% of the students from the various institutions during the year 2019 in the Bhubaneswar, Khorda district, Odisha.

VARIABLES

➢ **Research Variable-**

Dependent variable-

In the present study the independent variable is knowledge of health impact of school going children.

Independent variable-

In the present study the independent variable is use of Cell phone of school going children.

Attributing Variable-

Demographic variables such as, Age, Gender, Religion, Educational status of father, Occupation of father, Educational status of mother, Number of siblings, Type of Family, Types of house, Monthly family income.

SAMPLE:

School going children who were belongs age group between 10-18 years from the various institution of Bhubaneswar, Khorda, Odisha.

SAMPLE SIZE:

Total 200school going children were taken as sample from various institution of Bhubaneswar, Khorda, Odisha.

SAMPLING TECHNIQUE:

In this study **Simple random sampling technique** was used for data collection.

SAMPLE SELECTION CRITERIA

➢ **Inclusion criteria:**

- The students who are willing to participate in the study
- The students who are able to speak and write in Odia.
- The students who are age between 10-18 years.

➢ **Exclusion criteria:**

- The students who are not will to participate.
- The students who are absent during the data collection
- The students who are above 10 years.
- The students who are below 18 years.

DEVELOPMENT OF TOOL

A Structured validated Questionnaire was developed to assess the knowledge of health impact of the students regarding use of cell phone.

DESCRIPTION OF THE TOOL:

The tools developed consist of 2 sections.

Section-1: Socio-Demographic Data:

Section-2: Consist of questions (18 questions) for assessing the knowledge of the students regarding use of cell phone. The items were multiple choices in nature with its four responses. Out of these four responses one response is right. The subject has to choose the right response out of four.

SCORING

➢ Score 1 was given for every correct answer.
➢ Score 0 was given for every wrong answer.

Scoring procedure on knowledge regarding Health Impact of Use of Cell phone

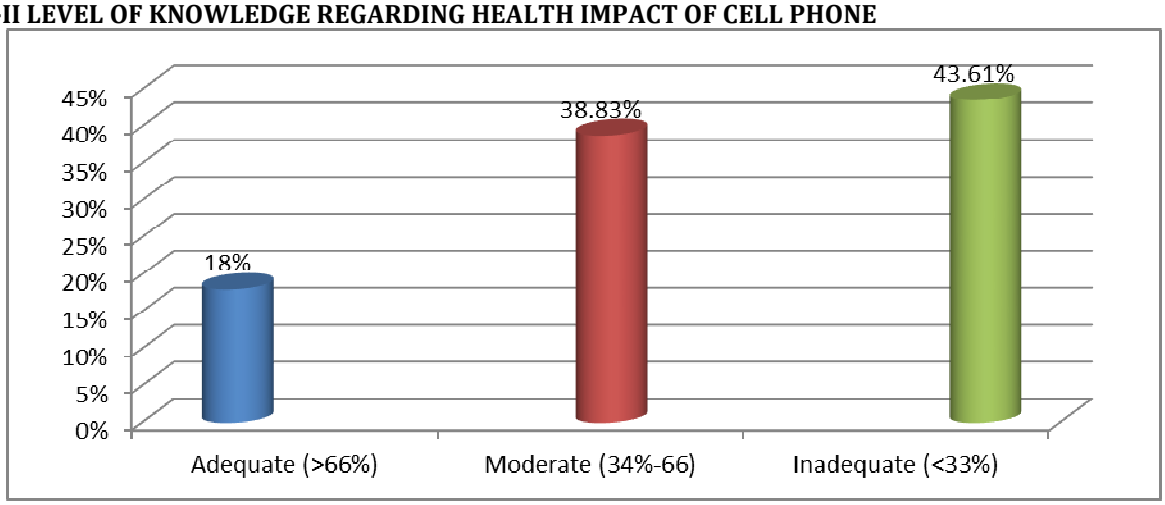
SL. NO.	Level of knowledge score	Score range	Percentage range
1.	Inadequate	1-6	Below 33%
2.	Moderate	7-12	Between 34-66%
3.	Adequate	13-18	Above 66%

RESULTS:

SECTION-I SOCIODEMOGRAPHIC CHARACTERISTICS

Based on the data collected 60% of the students reported that they have android mobile with internet connection and have the internet enabled phones. Around 90% of them have been actively using the internet mobile services to surf and browse the net. Among them the 200 students having mobile phones with net connection and 180 students actively used internet mobile services to surf and browse the net.The average hours spent on usage of smartphone by majority of the respondents (34%) lies on 5 -7 hours per day which is too much for students to spend those hours on academic activities rather than non - academic issues which eventually improves the academic performance because the time needed by student to concentrate on his/her studies is almost occupied by academic interactions like online materials, registering online courses.The majority of respondents responded positively on the use of smart phone for academic purposes(55 %) like sharing of materials or notes provided by lecturers/instructors compared to 32.5% who use their smart phone for nonacademic purposes (32.5%) like communications, chatting with friends browsing some social news for celebrities

SECTION-II LEVEL OF KNOWLEDGE REGARDING HEALTH IMPACT OF CELL PHONE



Graph 1: Percentage distribution of showing the result of knowledge of student regarding health impact of cell phone

Graph 1 Showing that most of the students were having inadequate knowledge that is 43.611%.Only 18 % students having adequate knowledge regarding Health impact of cell phone.

SECTION-II ASSOCIATION BETWEEN KNOWLEDGE LEVEL REGARDING HEALTH IMPACT AND THEIR SOCIO-DEMOGRAPHIC VARIABLE

association between knowledge level and their Socio-demographic variable compared to Age, Gender, Religion, father's occupation, Educational status of father's, mother's occupation, Number of siblings having, Type of family, Family income of children were shows significant association at 5% level of significance.

It is found that knowledge level of students were associated with some demographic variables so that the **Null hypothesis is rejected.**

DISCUSSION

Among the earliest studies on brain tumor risk associated with use of wireless phones were epidemiological studies from our group in Sweden. A significant increased risk for Glioma and acoustic neuroma was found for tumors in the most exposed area of the brain (ipsilateral) to RF radiation from both mobile and cordless phones (Hardell&Carlberg,2015) of special concern is that the risk was highest in subjects with first use of the wireless phone before the age of 20 years. Of further concern is that decreased survival of patients with glioblastomamultiforme was associated with long-term use of mobile and cordless phones, with highest hazard ratio in patients with first use before the age of 20 years (Carlberg&Hardell, 2014).Children have smaller heads and thinner skull bone than adults. Their brain tissue has also higher conductivity, and these circumstances give higher absorption from RF radiation than in adults (Gandhi et al., 2012). The developing brain is more sensitive to toxins, and it is still developing until about 20 years of age. The greater absorption of RF energy per unit of time, the greater sensitivity of their brains, and their longer lifetimes with the risk to develop a brain tumor or other health effects leaves children at a higher risk than adults from mobile phone radiation. The evidence so far poses the following questions: When, where, how, and why do children and adolescents use mobile phones, and what are the health consequences? What are the health consequences of chronic exposure to electromagnetic direct use by children.

CONCLUSION

The present study showed that the knowledge level among the students regarding health impact in terms mean only 18% students have adequate knowledge about health impact of cell phone, 38.83% have Moderate knowledge and 43.611% have inadequate knowledge about health impact of cell phone.

We want to highlight the potential need to improve the level of knowledge amongthe students on health impact. Some of the students gain knowledge from the family, and social media, so we need to teach the students regarding the health impact of the cell phone in college.

RECOMMENDATIONS

Further study may be undertaken as to the specific extent when can smart phone usage can be disruptive of learning processes and detrimental to studies.

1. The professors should give orientation on the use of smart phones especially for information to maximize their use as an aid to learning processes.
2. College Administration may create a hub wherein texts messages and pictures can be sent twenty-four seven (24/7) for a safe campus.
3. A mobileapp may be generated to monitor the students' behaviour on Smartphone usage to exhibit the accurate result.

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